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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/722,017   | 11/24/2003  | Frank Krause         | PO-7816/LeA 36,068  | 6996             |
| 34947  | 7590        | 07/01/2005           | EXAMINER            |                  |
| LANXESS CORPORATION<br>111 RIDC PARK WEST DRIVE<br>PITTSBURGH, PA 15275-1112 |             |                      | WARTALOWICZ, PAUL A |                  |
|  |             | ART UNIT             |                     | PAPER NUMBER     |
|  |             | 1772                 |                     |                  |

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                 |                  |  |
|------------------------------|---------------------------------|------------------|--|
| <b>Office Action Summary</b> | Application No.                 | Applicant(s)     |  |
|                              | 10/722,017                      | KRAUSE, FRANK    |  |
|                              | Examiner<br>Paul A. Wartalowicz | Art Unit<br>1772 |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1)  Responsive to communication(s) filed on \_\_\_\_\_.
- 2a)  This action is **FINAL**.      2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4)  Claim(s) 1-14 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) 1-14 is/are rejected.
- 7)  Claim(s) \_\_\_\_\_ is/are objected to.
- 8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on 24 November 2003 is/are: a)  accepted or b)  objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All    b)  Some \* c)  None of:
    1.  Certified copies of the priority documents have been received.
    2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1)  Notice of References Cited (PTO-892)
- 2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/24/03.
- 4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5)  Notice of Informal Patent Application (PTO-152)
- 6)  Other: \_\_\_\_\_.

**DETAILED ACTION**

***Specification***

1. The abstract of the disclosure is objected to because it is two paragraphs. The abstract has to be one paragraph. Correction is required. See MPEP § 608.01(b).
  
2. The disclosure is objected to because of the following informalities: the recitation "...and second shaped metal parts ( and 2)...” on page 7, line 20 is missing the numeral --1--. Appropriate correction is required.

***Claim Objections***

3. Claims 3, 5, 12 and 13 are objected to because of the following informalities: Proper Markush language reads as follows: “selected from the group consisting of” which should appear before the listing of items applicant wishes to group together in the afore mentioned claims. Appropriate correction is required.

***Drawings***

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "33" and "36" have both been used to designate "bores". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version

of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. The recitation "thermoplastic material molded onto at least a portion of said overlap region" in claim 1, line 12 renders the claim indefinite. How much of a portion is the thermoplastic material molded onto? Where on the composite is it molded: the top layer, bottom layer, or the profile?

6. The recitation "first and second shaped metal parts have bores having edges, at least some of said bores of said second shaped metal part..." in claim 8, lines 2-3 render the claim indefinite. It is unclear in what way the first and second metal part "have" bores. Are the bores attached to the metal parts? Are the bores extensions of the metal parts? The recitation "superposed over at least some of said bores of said first shaped metal part..." in line 4 of the same claim renders the claim indefinite. It is

unclear how the bores of the second metal part are superposed over at least some of said bores of said first shaped metal part. Does the word "over" in the recitation mean on top, on the bottom, side to side?

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-7 and 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Kampmann et al ('636).

As to claim 1, Kampmann teaches a plastic-metal composite article (col. 1, line 8) comprising, at least one first shaped metal part (fig 2, #a) and at least one second shaped metal part (fig 2, #c), each of said first and second shaped metal parts having an overlap region (fig 2, #1; col. 4, line 4) defined by a portion of said second shaped metal part being superposed over a portion of said first shaped metal part (fig 2, #a,c), wherein said first and second shaped metal parts are fixedly attached one to the other by an adhesive interposed between said first and second shaped metal parts in said overlap region (col. 4, line 7), thermoplastic material molded onto at least a portion of said overlap region (col. 4, lines 4-5), further wherein said first and second shaped metal parts are substantially free of direct contact with each other in said overlap region

(fig 2, #a,c), and said adhesive provides an electrically insulating layer between said first and second shaped metal parts in said overlap region (col. 3, line 14).

As to claims 2 and 3, Kampmann teaches a first and second shaped metal parts fabricated from aluminum or aluminum alloy (col. 1, line 6). As to claim 4, Kampmann teaches said adhesive having a thickness of from 1 to 300 mm (col. 4, line 17). As to claims 5-7, Kampmann teaches said adhesive selected from an epoxy adhesive (col. 4, line 7) comprising polystyrene spheres (col. 4, line 6). As to claim 11, Kampmann teaches said plastic-metal composite wherein each of said first and second shaped metal parts have an open profile (fig 3, #a,c), said article further comprising molded-on thermoplastic reinforcing struts (fig 3, #n) that are positioned abuttingly within the open profiles of each of said first and second shaped metal parts (fig 3, #a,c,n), and said molded-on thermoplastic reinforcing struts being continuous with the thermoplastic material molded onto at least a portion of said overlap region (fig 3, #n,3). As to claims 12-14, Kampmann teaches said thermoplastic region comprising material containing polyolefins such as polyethylene or polypropylene (col. 4, lines 4-5) further comprising reinforcing materials such as duroplastics (col. 3, lines 61-63).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kampmann et al ('636) in view of Goldbach et al ('U.S. 2001/0053431).

Kampmann teaches a plastic-metal composite as described above. Kampmann fails to teach first and second shaped metal parts having bores having edges that have deformities such as beads or bulges, at least some of said bores of said second shaped metal part are aligned with and superposed over at least some of said bores of said first shaped metal part and together define aligned bores having edges, said thermoplastic material molded onto at least a portion of said overlap region extending through at least some of said aligned bores, the edges of said aligned bores being embedded in the thermoplastic material extending there through, thereby fixedly anchoring the thermoplastic material to at least a portion of said region.

Goldbach et al. teaches a plastic-metal composite article having bores having deformed (flanged) edges (fig 1, #4) with thermoplastic material molded extending through at least some of said aligned bores, the edges of said aligned bores being embedded in the thermoplastic material extending there through, thereby fixedly anchoring the thermoplastic material to at least a portion of said overlap region (fig 2, #23,29) for the purpose of creating an electrically insulating layer between the metal parts (paragraph 0001, lines 7-8).

Therefore, it would have been obvious to one of ordinary skill at the time applicants' invention was made to provide bores having deformed edges with thermoplastic material molded extending through at least some of said aligned bores,

the edges of said aligned bores being embedded in the thermoplastic material there through, thereby fixedly anchoring the thermoplastic material to at least a portion of said overlap region in Kampmann et al. in order to form an electrically insulating layer as taught by Goldbach et al.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul A. Wartalowicz whose telephone number is (571) 272-5957. The examiner can normally be reached on 8:30-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Paul Wartalowicz  
June 16, 2005

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
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